

Work Order ID 155085

Tuesday, August 22, 2017 10:58:04 AM

Reprint

155085

Page 1

Item ID: D2432 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bearpaw 19" X 24"
 Start Date: 2/2/2017 Start Qty: 16.00 *16* Cust Item ID:
 Required Date: 2/16/2017 Req'd Qty: 16.00 *16*- Customer:
 Reference:

Approvals: Process Plan: ✓ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2432	H								

120 0.00
 120 FLOW WATER JET
 Waterjet Memo 2.52
 FLOW CNC Waterjet Cut Blank as per D2432 File

(16) 2/17/08/23

130 0.56
 130 HAAS CNC VERTICAL MACHINING #1
 HAAS 1 Memo 7.20
 HAAS CNC vertical machine #1
 1-Inspect material for defects or damage prior to machining
 2-Machine as per Folio and Dwg D2432 Identify as D2432F
 3-Deburr

14 (2) DAS 49 9-89 2017/8/2

140 0.00
 140 QC2- Inspect parts off machine FAI/FAIB
 QC Memo 0.16
 Quality Control

14 (2) DAS 49 9-89 2017/8/25

P.T.O.

DQA:

Date: SEPT 21 2017

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: SEP - 6 2017Work Order update only ☐

Work Order: <u>155085</u>		DISPOSITION		AGAINST DEPARTMENT/PROCESS																																																											
Part No. <u>2432</u>		Rework ☐		Skid-tube ☐		Cross tube ☐		Water Jet ☐		Engineering ☐																																																					
NCR No. <u>① 17-6602</u> <u>② 17-6603</u>		Scrap ☒		Machining ☒		Small Fab ☐		Prod. Eng. Coord. ☐		Quality ☐																																																					
		Use-as-is ☐		Thermoforming ☐		Finishing ☐		Rec/Store/Packaging ☐		Other ☐																																																					
		Suspected Unapproved ☐		Large Fab ☐		Composite ☐		Supplier ☐																																																							
Date: <u>17/08/31</u>		Step #: <u>130</u>		QTY Effective: <u>②</u>				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				DAS 9 9-89 17-09-01 Completed By DAS 49 9-89 Lead hand / Supervisor Approval Verification D.P 17-09-01 QC / QA Coordinator Approval DAS 9 9-89 17-09-01																																																							
#1) Bear paw thickness under tolerance (0.230) the show on drawing .250 ± 0.010 #2) used the wrong program with had the batch # From a previous w/o.				Scrap no replace.																																																											
Root Cause		FAULT CATEGORY																																																													
Environment ☐	☒ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Design ☐	☐ Operator	☐ Bending	☒ Set-up	☒ Folio/Program	☐ Outside Dimensions	☐ Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☒ Over/Under tolerance	☐ Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Handling/Pre ☐	☒ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence	☐ Past Expiry Date ☐	☐ Manufacturing Process	OTHER :	
Misidentified ☐	☐ Past Due																																																														

Work Order ID 155085***155085***

Page 2

Tuesday, August 22, 2017 10:58:05 AM

Item ID: D2432 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bearpaw 19" X 24"
Start Date: 2/2/2017 Start Qty: 16.00 ***16*** Cust Item ID:
Required Date: 2/16/2017 Req'd Qty: 16.00 ***16*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.32				14	1		mf 17/09/03
160 *160* Packaging Packaging	Identify as per dwg & Stock Location: <u>ST430A</u> Memo	0.00 0.16				14			SEP 05 2017 DAS 6 9-89
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 1.60							SEP 05 2017 DAS 21 9-89 SEP 05 2017 DAS 21 9-89

Picklist Print

Tuesday, August 22, 2017 10:58:03 AM

Page 1

Work Order ID: 155085

155085

Parent Item: D2432

D2432

Parent Item Name: Bearpaw 19" X 24"

Start Date: 2/2/2017

Required Date: 2/16/2017

Start Qty: 16.00

Required Qty: 16.00

Comments: IPP REV:A 12.10.17 AS PER DWG REV.H DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			120	sf	766.3310	3.7	59.2			

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

**

DE 17/08/23

Location

Loc Qty

Loc Code

MAT018

766.331

m136453

200

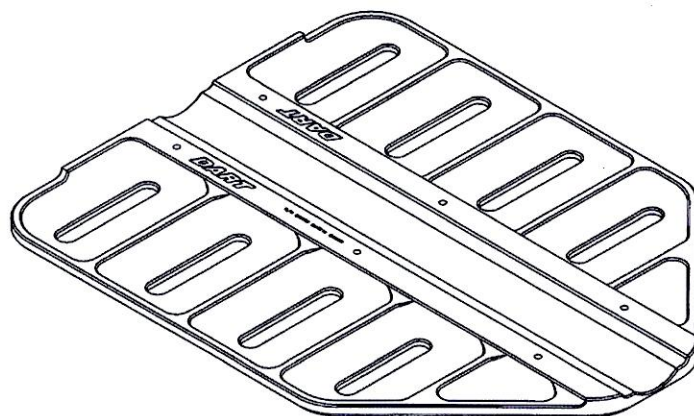
m137443

166.331

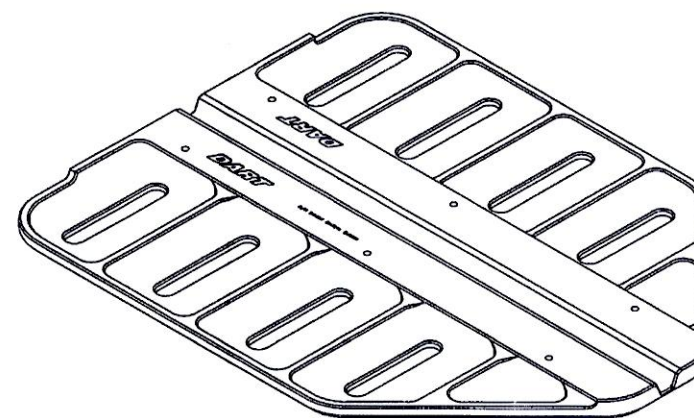
m138127

400

60



D2432F BEARPAW

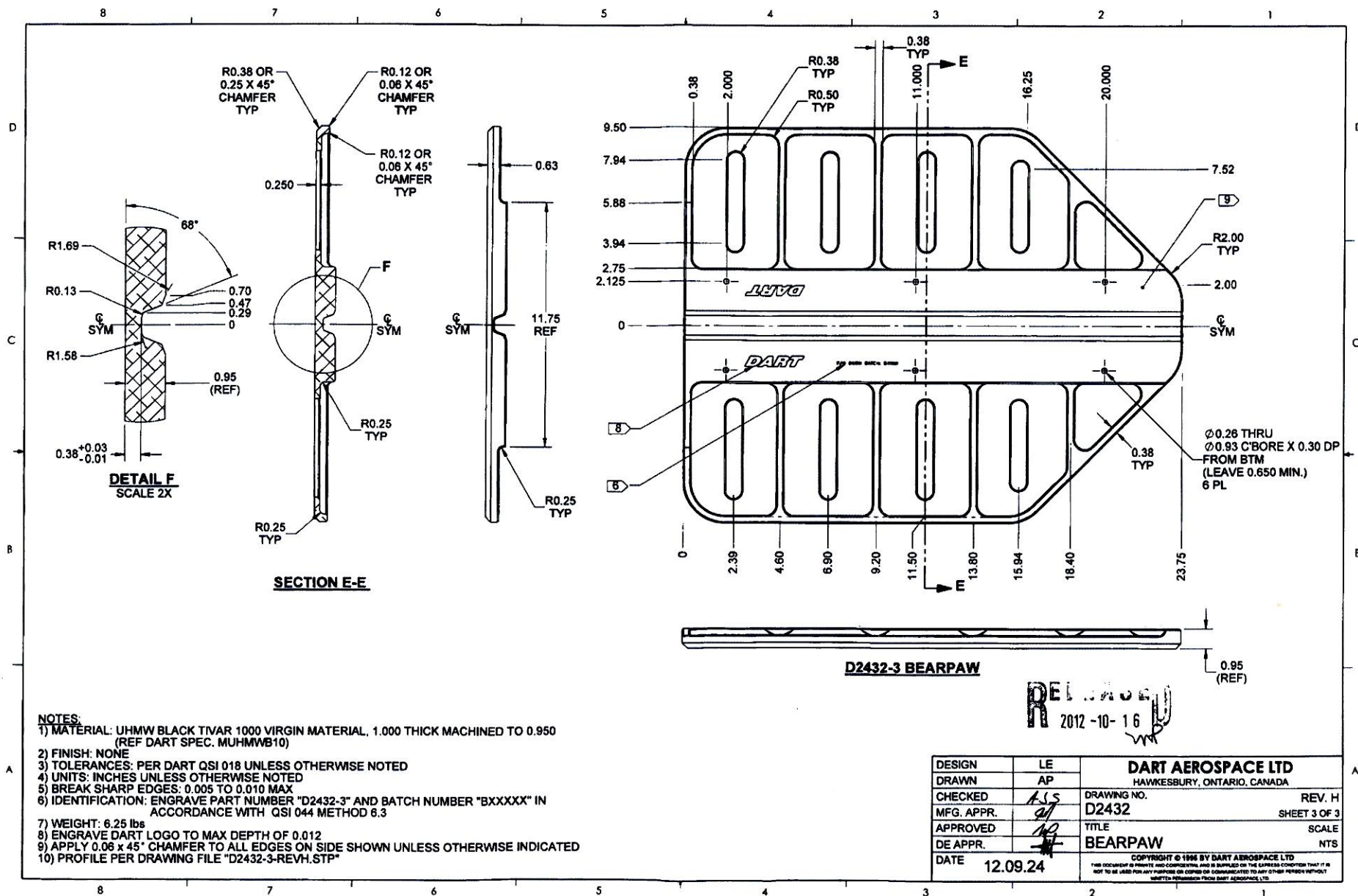


D2432-3 BEARPAW

W10155085

RELEASED
2012-10-16

REV.	DESCRIPTION	BY	DATE
H	RIB HEIGHTS CHANGED TO CONDITION OF REV. F. SEE REV. F FOR DETAILS.	AP	12.09.24
G	UPDATE DRAWING FORMAT, REMOVED D2432B, ADD D2432-3, ADDED DIMENSION 7.52 (D1-2)	AP	12.05.02
F	CHANGE C'BORE, ADD B AND F P/N	-	98.05.12
E	CHANGE C'BORE DEPTH, BORE RADIUS	-	97.02.27
D	MOVE SLOT	-	96.06.04
C	CHANGE BORE AND C'BORE DEPTH	-	96.03.26
B	RE-DESIGN	-	96.01.24
A	NEW ISSUE	-	95.10.31
DESIGN	LE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D2432 TITLE BEARPAW DATE 12.09.24	
DRAWN	AP		
CHECKED	<i>AS</i>		
MFG. APPR.	<i>AS</i>		
DE APPR.	<i>AS</i>		
REV. H	SHEET 1 OF 3	SCALE	NTS
COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



DART AEROSPACE LTD		Work Order:	155085
Description: Bearpaw		Part Number:	D2432
Inspection Dwg: D2432		Rev: H	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A 0.063 x 45°	+0.030/-0.010	.060 x 45°	✓		Vern MLC-06	
B 0.200	+/-0.030	.201	✓		high gage	
C 0.25 x 45°	+/-0.030	.250 x 45°	✓			
D R0.250	+/-0.030	R.250	✓		separitayon	
E 0.250	+/-0.010	.246	✓			
F 0.625	+/-0.030	.636	✓		Vern MLC-06	
G 0.375	+0.030/-0.010	.379	✓		Vern MLC-06	
H 0.950	+/-0.030	.947	✓		Vern MLC-06	
I 19.000	+/-0.030	19.000	✓		tape	
J Ø0.260	+0.005/-0.000	.260	✓		pin gage	
K Ø0.93	+/-0.030	.930	✓		Vern MLC-06	
L 0.30	+0.030/-0.000	.300	✓		Vern MLC-06	
M 23.750	+/-0.030	23.755	✓		Tape	
N 2.000	+/-0.030	2.000	✓		high gage	
O 0.38	+/-0.030	.382	✓		Vern MLC-06	
P						
Q						
R						
S						
T						
U						
V						

Measured by:	M.H.	Audited by:	ML	Preliminary Approval:	
Date:	2007/08/29	Date:	17/09/03	Date:	

Rev	Date	Change	Revised by	Approved
A	04.01.09	New Issue P/O D206-559-015	KJ/RF	
B	12.07.31	Dwg Rev updated	KJ	
C	12.10.26	Dwg Rev updated	KJ	
D	13.07.18	Dimension 7.375 removed	KJ	
E	15.02.09	Dimensions revised	KJ	